



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
**NORTH ATLANTIC DIVISION, US ARMY CORPS OF ENGINEERS**  
**FORT HAMILTON MILITARY COMMUNITY**  
**BROOKLYN, NEW YORK 11252-4760**

**JAN 10 2008**

CENAD-PSD-P

MEMORANDUM FOR Commander, Norfolk District, ATTN: CENAO-PM-P

SUBJECT: Review Plan Approval for Willoughby Spit and Vicinity, Norfolk, VA General  
Reevaluation Report

1. Reference:

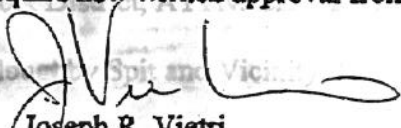
- a. EC 1105-2-408, Peer Review of Decision Documents, 31 May 2005.
- b. Memorandum, CECW-CP, 30 March 2007, subject: Peer Review Process.

2. The enclosed Review Plan for the Willoughby Spit and Vicinity, Norfolk, VA General  
Reevaluation Report has been prepared in accordance with the referenced guidance.

3. The Plan has been made available for public comment, and any comments received have been  
incorporated. It has been coordinated with the Planning Center of Expertise for Coastal Storm  
Damage Reduction. The Plan currently does not include external peer review.

4. I hereby approve this Plan, which is subject to change as study circumstances require,  
consistent with study development under the Project Management Business Process. Subsequent  
revisions to this Plan or its execution will require new written approval from this office.

Encl

  
Joseph R. Vietri  
Chief, Planning & Policy Community of Practice  
Program Support Division  
Programs Directorate

# **Peer Review Plan**

**Willoughby Spit and Vicinity**

**Norfolk, Virginia**

**General Reevaluation Report**

**January 2008**

## **Willoughby Spit and Vicinity, Norfolk, Virginia**

### **General Reevaluation Report**

#### **Peer Review Plan**

#### **INTRODUCTION**

1. The purpose of this peer review plan (PRP) is to describe the process for ensuring the accomplishment of a high quality and timely general reevaluation report (GRR) for the Willoughby Spit and Vicinity, Norfolk, Virginia, Hurricane and Storm Damage Reduction Project. The purpose of this GRR is to study and analyze the effects of coastal storms on the Willoughby Spit shoreline and areas south of the Willoughby Spit to Little Creek Inlet and to provide a recommendation based on the results. This PRP will govern a formal review process for the technical and policy compliance of the results of the GRR with the goal of producing a high quality product that is completed on time and within budget. The focus of the PRP is to describe this review process with particular emphasis on the conduct of the review and the documentation of the technical review activities that are accomplished throughout the study process. The technical review ensures compliance with established policy, principles, and procedures and the presentation of assumptions, methodology, appropriateness of data used, reasonableness of results, and ability of the plan to meet the needs of the community, region, and Nation. The PRP indicates the methods necessary for this study to adequately address the peer review and external technical review needs including the identification of study team and technical review team members. This PRP has been prepared in accordance with appropriate Corps guidance EC 1105-2-408, Peer Review of Decision Documents.

2. The NAD Community of Practice (COP) and the PCX concurred with conducting ongoing external independent technical review (EITR) on the GRR on 27 January 2006. The PCX is the manager of the EITR for all new feasibility studies, including external peer review for complex projects. Pertinent to the decision to conduct EITR was the recognition that the risk and magnitude of the project are not such that a critical examination by a qualified person or team outside of the Corps and not involved in the day-to-day production of a technical product is necessary. Additionally, there are no novel methods being employed for this GRR. There are no complex challenges for interpretation or any conclusions that will be made that are likely to affect changes to prevailing practices or to affect policy decisions that have a significant impact. Furthermore, there are no precedent-setting models being used in this GRR. All the models in use for this GRR have been used before and are being used on other projects at this time. Additionally, all models have gone through the certification process or are undergoing certification and will be certified during the GRR.

## **EITR PROCESS**

3. The EITR process for the GRR will be managed by the PCX. The following is a description of that process as related to the conduct of the GRR.

a. External Independent Technical Review -- As previously discussed, external ITR is being led by the National Planning Center of Expertise for Coastal Storm Damage Reduction (PCX-CSDR) in this investigation in accordance with Corps policy and procedures. The EITR team is comprised of members from the Philadelphia, Baltimore, and Mobile Districts. The EITR team is responsible for ensuring that all technical products of the study team meet Corps regulations, standards, and current guidance. The EITR team's review will focus on the underlying assumptions, conclusions, recommendations, models, and analyses in the context of established policy and guidance. The technical review for this study will be fully documented, and documentation and certification of technical/legal review will accompany the report(s) that are submitted for policy review. As previously discussed, technical review is the process that confirms the proper selection and application of established criteria, regulations, laws, codes, principles, and professional procedures to ensure a quality product. Technical review also confirms the constructability and effectiveness of the product and the utilization of clearly justified and valid assumptions and methodologies. Early identification of technical issues facilitates efficient resolution, minimizes policy review comments, and increases the likelihood of approval of worthy projects.

PCX-CSDR is leading the EITR Team. It should be noted that the EITR team has been briefed on the extent of their duties, and they understand that the review team's involvement in the study process is on-going and continuous. The PCX-CSDR manager for this study, in coordination with the EITR team, will be responsible for the following activities:

- (1) Lead and manage the EITR.
- (2) Coordinate the assembly of an appropriate EITR team.
- (3) Attend all milestones meetings, including IRC's and other vertical team meetings.
- (4) Conduct external technical review meetings with the PDT, as necessary, to resolve identified issues early on.
- (5) Maintain ongoing and continuous review of distinct products as they are completed such as problems, needs, and opportunities; assumptions, constraints, evaluation criteria, and forecasting methods; without project condition; possible solutions and initial screening of alternative plans; evaluation of detailed plans (benefit analysis, designs, cost estimates, environmental and cultural impacts, real estate requirements, etc; and plan selection [NED, NER, Locally Preferred Plan]).
- (6) In addition, conduct reviews and provide written comments with coordinated responses of major products and draft and final report including environmental documentation. Dr. Checks and a memorandum for the record (MFR) will be the basis of accountability for the review of major products, including the draft and final GRR. A review team member will

prepare the MFR and it will become part of the review team's records. Specific issues raised in the review will be documented in a comment, response, action required, and action taken format. Minor grammatical or editorial comments should NOT be included as part of Dr. Checks or the MFR, but sent to the PDT separately.

(7) Maintain a file on all external technical review documentation.

(8) Prepare a quality control report to document and certify the results of ITR.

b. Use of Checklists. Checklists may be used to guide the technical review and ensure that critical items are not overlooked (see Attachment I in the SOP for the Planning and Policy Community of Practice, Appendix 4, for an example). Checklists may be used to simplify the documentation of the review. Checklists may also be used to track outstanding action items for a particular study. The use of checklists shall not, however, eliminate the requirement to respond to specific comments.

c. Quality Control Report – The PCX-CSDR study manager will prepare a quality control report (QCR) for the draft and final report to include how the quality control process was performed, summary of issues and detailed comments, how they were resolved, minutes of technical review meetings, and other documentation supporting technical review and formal certification of technical review and legal sufficiency. The QCR will accompany submission of the draft and final report to NAD and HQUSACE.

d. Conflict/Dispute Resolution -- The general process for resolving technical and policy issues identified during the ITR is summarized in the Standard Operating Procedures for the Planning and Policy Community of Practice, Appendix 4, Quality Management, dated 12 May 2005. Unresolved differences between the PDT and review team shall be documented. The EITR review team leader is responsible for identifying any contradictory recommendations, or outright disagreements, among members of the review team and/or the PDT. If these differences cannot be resolved, the functional chiefs in the originating district (NAO) will make the ultimate decision regarding the resolution of these ITR comments. These significant issues shall be documented in the quality control report accompanying the appropriate documents submitted. The originating districts will request the NAD Planning Community of Practice Leader to assist in the resolution of complex technical and policy issues.

e. Public Review – The public will be able to review the document during the public review period. The Office of Water Policy Review will determine if an expedited review is warranted or if the review will take place after higher authority reviews the draft GRR. All comments received from the public will be given the same consideration as those received from the EITR team. The EITR team will likely be conducting its review at the same time the public review is on going. However, the EITR team will be made aware of the review comments received from the public and have an additional opportunity to comment.

## **PROJECT DELIVERY TEAM**

4. The PDT for this effort was selected based on the expertise necessary to provide the technical input required to address the scope of work as detailed in the project management plan. The PDT consists of a project manager, study team leader, core team members, extended technical resource team members, including supervisory oversight/resource availability team members and management oversight team members. During the course of the study, PDT members may change because of workload, study priorities, turnover, etc. Appropriate replacements will be provided, as necessary, by the oversight/resource availability team members. The following lists the PDT members including each member's discipline/role, and organization:

### **PROJECT DELIVERY TEAM**

<u>Discipline</u>	<u>Organization</u>
Project Manager	CENAO-PM-J
Technical Team Leader/ Plan Formulation	CENAO-PM-PR
City Project Manager/ Civil Engineer	City of Norfolk
City Technical POC/ Coastal Engineer	City of Norfolk

#### Core Team Members

Regional Economist	CENAO-PM-PR
Environmental Scientist	CENAO-PM-PE
Sociologist/Cultural Resources Specialist	CENAO-PM-PE
Coastal Engineer	CENAO-TS-EC
Geologist and Coastal Engineer	CENAO-TS-EC
Hydraulic Engineer	CENAO-TS-EC
Dredging Engineer	CENAO-TS-OD
Cost Engineer	CENAO-TS-ES
Real Estate Specialist	CENAO-RE
Environmental Scientist	CENAO-REG
Contracting Specialists	CENAO-BR-C
Public Affairs Specialist	CENAO-AA-D
Budget Analyst	CENAO-PM-R

#### Management Oversight Team Members

Chief, Planning and Policy Branch	CENAO-PM-P
Chief, Planning Resources Section	CENAO-PM-PR

### **EXTERNAL INDEPENDENT REVIEW TEAM**



7. The EITR team led by the PCX-CSDR study manager has been established representing all technical elements providing significant input to the study. The technical review team has the credentials and experience necessary to provide a comprehensive review relating to specific study disciplines as the team members provide input in their principal areas of expertise. The external independent review team members are not involved in the specific technical products under their review. In addition, the external independent review team can be augmented, as needed, with members from other external Corps offices, Centers of Expertise, labs, academia, or other sources of external peer review as determined necessary for a quality review. The following is a list of external ITR members at this time:

### **EXTERNAL INDEPENDENT REVIEW TEAM (EITR)**

<u>Discipline of technical reviewer</u>	<u>Organization</u>
EITR Project Manager, Plan Formulation	CENAP
EITR, Hydrology & Hydraulics	CENAP
EITR, Economics	CESAM
EITR, Environmental	CENAP
EITR, Cultural Resources	CENAP
EITR, Civil and Structural	CENAP
EITR, Geotechnical	CENAP
EITR, Cost Engineering	CENAP
EITR, Real Estate	CENAB

The Walla Walla District Directorate of Expertise for Civil Works Cost Engineering (Walla Walla DX) will also participate in the EITR.

**External Peer Review (EPR) Decision.** EC 1105-2-408 provides the process for deciding whether or not to employ EPR. The following is an excerpt of EC 1105-2-408, section 9a:

*Decision documents covered by this Circular will undergo EPR if there is a vertical team consensus (involving district, major subordinate command and Headquarters members) that the covered subject matter (including data, use of models, assumptions, and other scientific and engineering information) is novel, is controversial, is precedent setting, has significant interagency interest, or has significant economic, environmental and*

*social effects to the nation. Decision documents covered by this Circular that do not meet the standard shall undergo ITR as described in paragraph 8, above.*

Please see the EPR Decision Checklist below.

1. Novel subject matter? No, this is a typical shore protection project.
2. Controversial subject matter? No, this is a typical shore protection project with no controversial subject matter anticipated.
3. Precedent setting? No, this is a typical shore protection project similar to several preceding projects
4. Unusually significant interagency interest? No, this is a typical shore protection project and normal coordination with other agencies is anticipated.
5. Unusually significant economic, environmental, and social effects to the nation? The anticipated costs and effects are not unusual and estimated construction costs are not expected to exceed \$50 million, which is the threshold amount suggested for recommendation of an EPR.

**Decision:** New methodologies are not anticipated for the analysis or preparation of the Integrated Feasibility Report/Environmental Impact Statement (EIS). Similarly, neither data being collected, nor any associated analysis would be considered scientifically influential. Therefore, Independent Technical Review (ITR) by a USACE team outside the project district (CENAO) will meet the requirements of EC 1105-2-408 for most aspects of the decision document. There is not a high potential for EPR, due to the potential cost of the recommended plan not to exceed \$50 million.

**Selection of External Peer Reviewers.** PCX-CSDR will make the final determination for the discipline type and number of reviewers, as well as if any External Peer Reviewers are needed.

## **Planning Models and Certification**

8. The GRR will utilize the planning model Beach-FX for estimating damages and potential benefits to the project. This model is currently undergoing certification thru the Institute for Water Resources. This model was developed by the Engineering Research and Development Center's Coastal and Hydraulics Laboratory. The model was released for use to Corps' districts in the fourth quarter of FY 07. It is anticipated that the certification of this model will be completed before any plan recommendations are made.

## **STUDY MILESTONE SCHEDULE**

9. The overall accomplishment of the appropriate independent technical review process for the



Willoughby Spit and Vicinity GRR is the responsibility of the project manager in coordination with the study team leader and PDT. As previously discussed, the Philadelphia District has been employed to conduct the required ITR. It is important to ensure that technical review is ongoing and as issues are identified, meetings are scheduled to resolve those issues and proper documentation of the resolution of the issues is prepared, filed, and coordinated, as appropriate. Milestone meetings that include higher authority, local interests, and District personnel will be scheduled as required to discuss the scope of the study, study process and progress, study direction, and any pertinent issues that require such a meeting. All issue meetings are documented for the technical review files. The following table presents the major milestones that are scheduled or have already been conducted. In addition, technical review meetings, in-progress review meetings, project review board meetings, and issue resolution conferences will be held, as needed, and documented for the ITR files.

### **Schedule for the Preconstruction, Engineering, and Design Effort**

Execute Design Agreement	31 May 05
Initiate General Reevaluation Investigations	1 Jun 05
Initial Meeting between Norfolk District Staff and City Staff	22 Jun 05
H&H Ready for Input to BEACH-fx	Jan 07
BEACH-fx Runs Completed for All Alternatives	Sep 07
Plan Formulation Process Completed	Jan 08
Draft Formulation Analysis Notebook Completed	Mar 08
Draft Formulation Analysis Notebook Submitted for External Independent Technical Review	Apr 08
Formulation Analysis Notebook Read-Ahead Forwarded to Higher HQ	May 08
Alternatives Formulation Briefing Conducted	Jul 08
Draft Feasibility Report and Environmental Assessment Submitted for Concurrent Review to Higher HQ and Agencies	Oct 08
Final Feasibility Report Submitted	Mar 09
Civil Works Review Board Conducted	Jun 09
Final Feasibility Report (FFR) Distributed for State and Agency Review	Jul 09
Comments Due	Aug 09
FFR, Signed Chief's Report, and Signed Record of Decision (If Needed) Submitted to ASA	Oct 09
FFR, Signed Chief's Report, and Signed Record of Decision (If Needed) Submitted to OMB	Dec 09
FFR, Signed Chief's Report, and Signed Record of Decision (If Needed) Submitted to Congress	Feb 10
Water Resources Development Act Passed Giving Construction Authorization	
Design (Including Permits) (2 years)	
Construction (1 year)	

### **SUMMARY**

10. In summary, conduct and documentation of the technical review for the Willoughby Spit and Vicinity, Norfolk, Virginia, Hurricane and Storm Damage Reduction Project GRR is an ongoing process that will provide assurance that a comprehensive and independent review has been conducted in accordance with the principles and guidelines established. The external independent technical review team leader, working through the project manager and technical team leader, will ensure that the above is accomplished. In addition, District Commanders, District functional chiefs, the DST, Planning COP, and RIT share the responsibility of ensuring a quality product. In this context, quality control is everybody's business.